

CARE AND MAINTENANCE

Aluminum Patio Doors

This guide provides important information that will help to keep aluminum patio doors looking beautiful and operating smoothly for many years. It is necessary to take some time every year to clean and inspect your aluminum patio doors for damage.



TABLE OF CONTENTS

Precautions and Safety 2

Needed Materials & Tools 2

Basic Inspections & Maintenance 3-4

Cleaning Glass Surfaces 4

Cleaning Aluminum Surfaces 5

Hardware Cleaning & Lubrication 5-6

Glossary 7

Inspection Checklist 8

CONTACT US

For questions, feel free to contact us at technical@glassexpanse.com or 254.534.9004

The advice offered herein can be done by a homeowner with some mechanical aptitude. If you are unsure, it is recommended that you hire a trained service provider such as a competent and licensed construction contractor or building professional. GLASS EXPANSE disclaims any and all liability associated with the use and/or provision of these instructions. Any reliance upon the information or advice is at the risk of the party so relying. The information contained herein may be changed from time to time without notification.

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PRECAUTIONS, SAFETY AND CLEANING RECOMMENDATIONS

► PRECAUTIONS AND SAFETY

- Window insect screens are not security devices and will not prevent a child or anyone from falling through.
- Never mix cleaners or solvents. This may be dangerous as well as ineffective.
- Use help when working with a large window sash or patio door panel to avoid injury.
- Use proper/safe equipment and precautions when cleaning and servicing the exterior side of windows above ground level.
- If using commercial cleaning or finishing products or solvents, carefully read and follow safety instructions, warnings, cautions and disposal instructions on manufacturer's labels. Wear appropriate safety gear (e.g. clothing, goggles, gloves) and provide plenty of ventilation.
- Immediately clean spills.
- Most solvents are flammable and/or toxic and must be handled with extreme care. Do not use near open flame, sparks, or electrical motors.

► RECOMMENDATIONS

- Do not power-wash or use a garden hose; this can cause seal failure and allow water to enter the structure.
- When cleaning exterior, multi-story windows, begin with the upper story and work down.
- Avoid using metal tools, razor blades, or other sharp objects and abrasive cleaners. They can damage surfaces, scratch glass and remove exterior glass coatings.
- Do not allow aggressive cleaners to come into contact with Aluminum surfaces. Immediately rinse and dry.
- Do not allow cleaners to puddle or collect at glass edges near glazing materials.
- Avoid cleaning in direct sunlight or in temperatures too hot or too cold.
- Avoid excessive rubbing and over-cleaning.
- Do not scour.
- Clean and rinse one area at a time.
- Clean twice a year (monthly in coastal areas) or when dirty.
- After-market tints and films are not recommended, as they may cause damage to the glass and/or sealant.

NEEDED MATERIALS AND TOOLS

- Baby shampoo or mild soap and water or vinegar and water
- Several clean, soft, non-abrasive, absorbent Chamois or lint-free dry cloths
- Soft bristle brush
- Spray bottle
- Vacuum cleaner
- Sponge
- Appropriate solvent
- Commercial glass cleaning products or solvents (for stubborn stains)
- Plastic putty knife (for paint or label removal)
- Plastic wrap (for label removal)
- Spray silicone



BASIC INSPECTIONS AND MAINTENANCE

► INSECT SCREENS

1. Inspect screens for
 - Cuts, scratches, or holes
 - Looseness
2. Replace or repair damaged screens. Contact a local supplier for repair or replacement information.

Note! Screens may not be covered under manufacturer's warranty. To be sure, ask your supplier or distributor.

► SASH/PANEL AND FRAME INSPECTION

- Inspect sash or patio door panel annually (monthly for coastal areas).
- Inspect stiles and rails for damage.
- Check glass for cracks. If cracked, call your local supplier for replacement.
- For insulating glass units, look for moisture or fogging between glass panes (most likely to occur on cold mornings). This may be an indication of seal failure. Call us for recommendations.
- Verify the sealant at each corner of the frame is intact. Repair as necessary with 100% silicone sealant.

► WEATHERSTRIP

Inspecting and maintaining weatherstrip can help avoid costly structural damage from water leakage and energy loss due to air and/or water infiltration. Replace weatherstrip that is missing, torn, cracked, brittle, discolored, gummy, or that has no "bounce back" when pressed down. Call us for replacement instructions.

Precautions

- We recommend denatured alcohol for non water-soluble cleaning (for stubborn stains, lacquer thinner may be used in small amounts and only as directed). Other solvents such as mineral spirits or petroleum-based products may damage or dissolve weatherstrip.
- When using alcohol, always test small area first to avoid product damage.
- Do not use anything sharp near weatherstrip.

Light Cleaning

1. Clean with damp cloth or mild soap and water.
2. Rinse and dry thoroughly.
3. Repeat if necessary.

Non Water-Soluble Cleaning

Clean with denatured alcohol on soft cloth. If denatured alcohol doesn't work:

1. Clean with small amount lacquer thinner on soft cloth.
2. Repeat if necessary.
3. Clean with mild soap and water, then rinse. If unsuccessful, consider replacing weatherstrip.

Repair

If weatherstrip is loose or falling out of the kerf:

1. Carefully remove weatherstrip.
2. Apply thin bead of silicone sealant into kerf.
3. Reinstall weatherstrip.
4. Hold in place with tape for 24 hours.
5. Carefully remove tape.

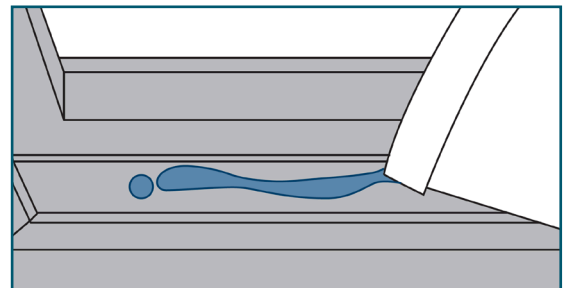
► GUTTERS AND OVERHANGS

Gutters and overhangs protect windows and patio doors from excess water exposure. Clear at least once per year.

► WEEP SYSTEM

Aluminum patio doors are not subject to moisture damage; however, damage could develop in the structure around the unit if water does not drain properly from the sill area. Weep systems are designed to drain water to the exterior. If water does not drain quickly from the sill through the weep system, check the weep holes for blockage as follows:

1. Regularly clean sill track with vacuum or wipe thoroughly with damp cloth.
2. Pour small amount of water (1 cup) into interior sill track. If water drains through exterior weep holes or crevice, system is clear. If not, continue to Step 3 to clean.



3. Insert thin wire into the exterior weep hole in the frame. Do not insert the wire farther than necessary to clear the blockage because the insulating glass unit may become damaged. Call us if unsure.
4. Repeat step one until water runs clear to the exterior. If not successful, call a service technician.

BASIC INSPECTIONS AND MAINTENANCE (Cont.)

► EXTERIOR SIDING JOINT

A proper seal of the joint between the exterior surface of the structure will provide a proper shield from the elements and will keep water and/or air from leaking into the home.

Inspect sealant in the joint for:

- Cracks
- Voids
- Deteriorating areas (e.g. loss of adhesion)

Repair damaged sealant with a best quality sealant.

Note! Do not apply sealant to areas where installer or contractor did not originally seal. Seek professional advice from an installer or contractor if unsure.

When repairing a sealant joint, 100% silicone sealant is the most durable, but it cannot be painted. Use 100% polyurethane sealant if painted. Follow sealant manufacturer's instructions for proper application.

CLEANING GLASS SURFACES

► GENERAL CLEANING

Prepare cleaning solution (1 tsp baby shampoo to one gallon of water or 1-1/2 cups vinegar to one gallon of water).

1. Rinse surface with clean water from top to bottom.
2. Clean with mild soap and water and sponge or soft brush with uniform pressure horizontally, then vertically.

Note! Quickly rinse and dry any run-down. Don't allow cleaning solutions to collect or puddle on surfaces, crevices, etc.

3. Promptly rinse thoroughly with clean water (sponging while rinsing may be helpful; do not allow cleaning solution to dry on the surface).
4. Wipe dry with lint-free, dry cloth.
5. If necessary, repeat steps above until clean.
6. Dry window frame and sill with separate cloth.

► STUBBORN STAIN REMOVAL

For stubborn stains, commercial glass cleaning products may be necessary.

- Apply small amount directly to the stain. Avoid spilling or dripping down the glass.
- Some persistent stains may need higher strength cleaning solutions that contain active ingredient chemicals such as toluene, xylene, mineral spirits or naphtha. Special care must be taken when using these types of cleaners.
- For oil and grease: try baking soda and water or washing soda and water.
- Rinse thoroughly with clean water and dry.

► PAINT REMOVAL

1. Soak dried latex paint drips with warm water and baby shampoo solution.
2. Wipe with damp cloth or sponge.

If needed,

3. Scrape gently with plastic putty knife. Repeat soak and scrape.
4. Repeat if necessary.

Note! For oil-based paint drips, consult local paint professional.

► LABEL REMOVAL

Slowly peel from one corner. If label tears or sticks, moisten with soapy water and gently scrape with plastic putty knife. Stubborn labels can be soaked with soapy water and covered overnight with plastic wrap. Gently remove with plastic putty knife.

► MORE INFORMATION ON GLASS CLEANING

- The Glass Association of North America (GANA): www.glasswebsite.com
- Oldcastle BuildingEnvelope: www.obe.com

Note on Websites! Website content is subject to change and should be used for informational purposes only. GLASS EXPANSE is not responsible for third-party information.

CLEANING ALUMINUM SURFACES

Aluminum windows usually have either a "baked-on" enamel finish or an anodized protective finish. Inspect aluminum surfaces for scratches or cracks in the finish. Pay close attention to bare aluminum (edges and weep holes) and areas of no finish. Bare aluminum will oxidize over time. Oxidation is a natural occurrence that produces a coating that wipes off as a dark, metallic looking residue.

To remove oxidation:

1. Gently remove with fine scratch pad or steel wool; do not scratch finished surfaces.
2. Dust or vacuum residue and wipe clean with damp cloth.

For optimum protection against oxidation, apply a coat of high quality car wax over the enamel or anodized finish.

To clean finished or coated (e.g. anodized) aluminum surfaces:

1. Wipe with sponge and water.
2. Dry with soft cloth.

If soil adheres:

1. Sponge or lightly brush with mild soapy water.
2. Rinse and wipe dry with soft cloth.

For very stubborn soil:

1. Wipe with mild solvent (mineral spirits) and a clean soft cloth or non-abrasive nylon cleaning pad to remove grease, sealant or caulking compounds.
2. Dry with separate clean cloth.
3. Clean residue with sponge, mild soap and water, rinse and let dry.

HARDWARE CLEANING AND LUBRICATION

Cleaning and lubrication help to maintain and restore smooth operation to movable parts of patio doors and, in most cases, offer corrosion protection. Always thoroughly clean hardware before lubricating.

Maintain hardware any time doors are not opening or closing properly or at least bi-annually (monthly for coastal areas) for the following:

- Clean dirt/debris
- Tighten loose screws
- Replace damaged hardware

► PRECAUTIONS

The following substances may damage protective hardware finishes.

Do not use:

- Vinegar-based cleaners
- Citrus-based cleaners (lemon, etc.)
- Paint removers
- Window cleaners
- Brick/siding washes
- Any other industrial or abrasive cleaners

Use caution with silicone-based sprays. Apply only in small amounts and do not overspray. Wipe off excess lubricant to avoid staining and/or damage to other patio door parts. Silicone may cause some hard plastic parts to become brittle.

► HARDWARE TYPES

Metal hardware offers functionality, aesthetic appeal and resistance to corrosion, but is not totally corrosion proof. Replace corroded hardware.

Plastic hardware offers high resistance to the elements; however, over time, can deteriorate from ultraviolet light, heat, cold, and chemical exposure.



HARDWARE CLEANING

General Cleaning

1. Open doors for easier cleaning.
2. Use mild soap and water on a soft cloth or sponge; rinse and wipe dry. For stubborn dirt, use a soft bristle brush to gently scrub.
3. Apply several coats of high quality, non-abrasive car wax.

Heavy Cleaning

Solvents, abrasives, and other cleaners could cause damage to protective coatings on hardware. If the general cleaning procedure is not sufficient, call us for recommendations.

HARDWARE LUBRICATION

Different hardware parts need different types of lubricants.

SUGGESTED LUBRICANT TYPES

White or Lithium Grease:

Protects metal surfaces against corrosion, reduces friction and wear on moving parts, and is an excellent multi-purpose lubricant.

Light Oil (such as 3-in-One®):

Use for sliding or rotating joints.

Graphite (spray black carbon powder):

Use for door lock key ways and hinges.

Note! Use care when applying graphite to prevent possible staining of parts.

Spray Silicone:

Use for wheels, slider tracks, jamb liners and weatherstrip.

Note! Do not spray directly onto hardware surfaces. Spray onto clean cloth to apply.



Plastic Hardware

Most hard plastic hardware parts require periodic cleaning for smooth operation and do not require lubrication.

Rotating Joints

Light oil provides lubrication for rotating joints such as hinge pivots spray lubricants or graphite are acceptable, but need frequent application.

1. Open doors for access to joints.
2. Oil as required.



Slider Tracks and Jamb Liners

Slider tracks or jamb liners can become dirty and difficult to operate.

Keep clean and lubricate as follows:

1. Open all doors.
2. Vacuum track or wipe with a soft cloth.
3. Apply spray silicone to dry, soft cloth. Wipe onto track, jamb liner and/or weatherstrip. Do not apply silicone to pile (fuzzy) weatherstrip.
4. Slide each panel and check operation.

Patio Door Rollers and Locks

Removing patio door panels can be dangerous and should be performed by service personnel or at least with additional help.

1. Open door panel for access to rollers on the bottom and top.
2. Lubricate rollers where the shaft goes through the middle of the wheels with light oil.
3. Lightly oil lock at each latch point.
4. Spray keyway lock with graphite lubricant.

GLOSSARY

Frame

The assembly of structural members (head, sill and jambs) used to fasten the patio door to the structure.

Insulated Glass Unit

A sealed assembly of two or more panes of glass separated by a spacer.

Kerf

A groove that often holds weatherstrip.

Keyway

The slot in the lock where the key is inserted.

Patio Door Panel

An assembly comprised of stiles (vertical pieces), profiles (horizontal pieces) and the patio door's glass.

Rail

The horizontal piece of the system that is fixed into the beam or floor

Seal Failure

The airtight seal between two panes of an insulating glass unit has broken and is usually discovered when excess moisture fogs the inside of the glass panes.

Side Jamb

The vertical frame member on either side of the patio door.

Sill

The bottom horizontal frame member.

Stile

The vertical piece of a sash or panel.

Weatherstrip

A strip of material that covers the joint between two separate parts of a window or patio door and is used to prevent rain, snow and cold air from entering.

Weep Hole

The visible exit or entry part of a water drainage system used to drain water out of a window unit.



INSPECTION CHECKLIST

INSPECTION DATE ____/____/____

EXTERIOR	NOTES
Aluminum Surface <ul style="list-style-type: none"> <input type="checkbox"/> Dirty <input type="checkbox"/> Cracks, scratches, blisters, other damage 	
Sealant Joint <ul style="list-style-type: none"> <input type="checkbox"/> Cracks, voids, other damage <input type="checkbox"/> Deterioration, loss of adhesion 	
Glass <ul style="list-style-type: none"> <input type="checkbox"/> Dirty <input type="checkbox"/> Scratched, cracked, other damage 	
Weatherstrip <ul style="list-style-type: none"> <input type="checkbox"/> Missing or loose <input type="checkbox"/> Tears, cracks, other damage <input type="checkbox"/> Brittle, gummy, discolored <input type="checkbox"/> No "bounce back" 	
Insect Screen <ul style="list-style-type: none"> <input type="checkbox"/> Dirty <input type="checkbox"/> Missing or loose <input type="checkbox"/> Mesh damaged or loose 	
Gutters <ul style="list-style-type: none"> <input type="checkbox"/> Dirty <input type="checkbox"/> Damaged <input type="checkbox"/> Missing 	
INTERIOR	NOTES
Aluminum Surface <ul style="list-style-type: none"> <input type="checkbox"/> Dirty <input type="checkbox"/> Scratched, cracked, other damage 	
Glass <ul style="list-style-type: none"> <input type="checkbox"/> Dirty <input type="checkbox"/> Moisture between Panes (insulating glass only) 	
All Product Hardware <ul style="list-style-type: none"> <input type="checkbox"/> Dirty or damaged <input type="checkbox"/> Discolored or tarnished <input type="checkbox"/> Problems with sash locks 	
Patio Doors <ul style="list-style-type: none"> <input type="checkbox"/> Track dirty <input type="checkbox"/> Problems with rollers <input type="checkbox"/> Problems with locks <input type="checkbox"/> Locks or hinges need lubrication 	